PRESENTER: Social impact assessment. I will start out by saying that there are no models here. There are no computer programs. There is no IMPLAN. There is no benefits transfer. Although there's some analogies to benefits transfer. So this is -- we do not have some of the tools our economist counterparts are fortunate to have to help them do impact assessment. So there are no magic bullets here, okay? But there are some tips and tricks that you can use that have been -- that have worked in hundreds of social impact assessments. So I'm going to start out and try to scare you a little bit and then leave you with hope and techniques.

So this is kind of how this section works out. I'm going to talk about a definition of social impact assessment and give you some examples of what types of impacts, various types of projects have looked at.

Then Joan is going to give you some examples of impact analyses from RMP's and we're going to do an exercise.

And then I have a number of different techniques for doing social impact assessments that I'll share with you.

So that's what this next section will look like.

And I want to point out -- you don't -- please don't look for it. We got criticized in our reviews yesterday for not having tabs in our binder, and appropriately so, might I add, but this is just for you to look at at home, but I just want to draw your attention to it. Back in the nether regions of the notebook there, there is a thing that looks like this, U.S. Principles and Guidelines for Social Impact Assessment, and it says in the U.S.A. just because there's a counterpart that's designed more for settings outside the U.S., and this is by the Interorganizational Committee on Principles and Guidelines for Social Impact Assessment, which was developed by a multi-agency group of social scientists. So I think you'll learn a little more when you take a look at this and you'll find this interesting. So be aware that that exists.

Okay. The definition -- and this is from that very source. "Social impacts are the consequences to human populations of any public or private actions that alter the ways" -- I don't usually read slides, right, but I want to point out some things about this one, so that's why I'm reading it -- "the ways in which people live, work, play" -- play is relevant to a lot of recreational opportunities -- "relate to one another" -- so we're concerned with impacts to social networks "and to social organization within our society organized to meet their needs" -- this is institutions, this is infrastructure, this is police, this is fire, this is churches, this is the institutions we develop locally and regionally and nationally to help us meet our needs and generally cope as members of society. "Term also includes cultural impacts involving changes to the norms, values and beliefs that guide

and rationalize their cognition of themselves in their society."

So, you know, I like this definition because it is so all encompassing and gives you an idea of just the full range of the types of impacts we're considering.

So when we do something that affects Ben's subsistence resources, we should not use market values for beef or chicken in Anchorage and add the shipping cost of those foods to Barrow to value any losses in subsistence activities or access to activities or subsistence resources because that does not pay attention to these cultural impacts involving the changes to the norms, values and beliefs that guide his society, which is the same as his lifestyle and his survival, his cultural as well as his physical survival, yeah? And so if we were valuing a loss of those resources, we would have to include as social scientists those cultural losses associated with the inability to do those activities or restrictions on those subsistence activities, and if we were economists, we would, of course, be able to attach a dollar value to that cultural loss if we chose to try and measure it.

People might not like it because people would say, oh, there's some things you can't measure, but if you give an economist money to attach a value to something, they're going to be able to do it, right? So this shows just the -- how all encompassing social impact assessment can be.

And I want read a couple sentences from a couple different things here. This is designed to be the scary part. This is -- we mentioned earlier a Utah State

University review of social and economic portions of impact analyses, right? It was on a previous slide, one -- in one of these past weeks we've been here. And it's a review of the socioeconomic analysis and the DEIS prepared by the Bureau of Land Management Ridgefield Field Office. And it's -- you know, it's a lengthy document. It has a lot of pages in it. But I'm just going to read one example, and this is a quote from the draft EIS and then I'll read the comment by Utah State. This is one of the summary and statements from the EIS.

"Livestock grazing in alternative N would play a small role in the local economy and an important role in the local custom and culture." Okay. Well, that's kind of good, because they're distinguishing those two types of effects, right? We've talked about that. "Management under alternative A would not alter this role. Management actions under alternatives B and C could have measurable economic impacts that would be very small in comparison to the livestock economy and total economy for the five county economic study area and could impact the custom and culture of livestock grazing in areas where changes to the livestock grazing management occurred." And here is the university comment: "Each of these statements regarding custom and culture is true, but they are equally superficial and do not appear to be supported by any analysis or data. There's a large body of social science research that uses qualitative methods. Qualitative should not be synonymous with brief or trivial. It can in fact be quite rigorous. But just like quantitative research, it must rely on gathering the appropriate data."

Social Impact Assessment (cont)

And, you know, this is an example of one of the links between the planning steps,

and if you have done a lot of social impact assessments, you have worked in

data poor situations where you've had to wing it and you have worked in data rich

situations where you could rely on your data to make your statements, and let me

tell you, there is nothing like having good data available. It is a godsend. It is a

luxury. It makes you feel -- it's like hero snow, you know, when you're seeing.

It's incredible. So when you get to this point and you realize, oh, man, I don't

really have any data, you know, that's when you better hope that you have 20

years of experience writing these things because you'll at least know how to wing

it and probably pass muster, but without that breadth and depth of experience

you're just in serious trouble. And so -- because people like Utah State, Utah

State was hired by a group of commissioners from six counties to review this.

They couldn't do it themselves, but they knew where to go. And they're going to

do it again. Anyone is going to do it again if they're not happy with your analysis.

CLASS PARTICIPANT: [inaudible]

PRESENTER: No, I said we referred to it in a previous slide.

CLASS PARTICIPANT: Can we get a copy of that?

PRESENTER: Don't know why not. I got one here.

CLASS PARTICIPANT: It's in the book --

PRESENTER: Is it in the book? Oh, okay. Don't look for it. Trust us. Trust us.

It's there somewhere.

I want to read you one more quick thing, and this is a press release. Here's another thing you never want to see as a federal employee. It's from last year. It involves my agency but -- the Atlantic, not the Pacific. "U.S. Representative Walter B. Jones, Republican, 3rd District, is calling changes made by the National Marine Fisheries Service to the socioeconomic impact analysis section of proposed regulations for snapper/grouper unconscionable. The council had previously acknowledged a proposed reg would have a disproportionate effect on North Carolina fishermen and that the snapper/grouper fishery on the Outerbanks could be extinguished under the new rules. In a version received by the secretary and published in the Federal Register, the regulations were not expected to result in a disproportionate negative impact on fishermen from North Carolina and Florida. NMFS's actions in presenting a false picture of the proposed amendment's economic impact are unconscionable, wrote Jones in a letter to Bill Hogarth" -- our National Marine Fisheries Service Director -- "and he asked him to halt all action on the proposed rule and prepared a revised proposal that addresses these concerns."

Now, I don't know the full story behind this, but I think as public servants we can

all recognize that we don't want to see ourselves in press releases mentioned in this type of context.

So people -- as we said early in the course about why we try and do a better job of social and economic impact assessments, these couple of examples should really drive that home. So I thought they were appropriate to begin this section with.

So with the next few slides I have I thought it would be kind of fun to show the range of types of effects that different types of projects have looked at, and some of them are land management projects and some of them are very different, just to show you the types of effects that are analyzed in a social impact assessment are kind of closely related to the nature of the changes that are going to be undertaken, the nature of the activities that are going to be undertaken as part of the proposed action. And as we've said before, you know, some of these actions may result in changes directly to social and economic conditions, and others may have intermediate steps of impacts to wildlife resources or impacts to fisheries resources or impacts to recreational opportunities that then we translate into impacts to -- impacts to people.

The point I want to make here to emphasize -- or to reiterate something I said yesterday was that the level and type of social impact depends not only on the degree of change but on how people respond to and react to that change. That's where, you know, I talk about resiliency comes in as kind of an intervening

variable. You can have the same level of change in two communities, highly resilient, very low resilient, and the net effect on those communities will be different, because one is better equipped to deal with that change than the other. So we have to look for those -- and it's the same with households. You know, a household with alternative sources of stable income is going to be less affected by a reduction in something they care about, whether they're a rancher or an outfitter or a logger or somebody who works in a mill than if that's their household sole source of income, they kind of have less of a buffer. They're going to be less resilient to those changes, less able to deal with negative changes in their ability to make their living, if that's their sole source of household income.

You know, I have to mention at this point, too, that we've said that we have to talk to people to find out the meaning of change and how they expect to deal with impacts, but the downside -- I mean, the plus side of being social scientists is we can talk to the people who are going to be affected. We don't just have to do something and then measure their response through radio collars or scat or something, you know. But the downside of that is that people are very adaptable, and people are very strategic, and we all have seen a lot of examples of gloom and doom scenarios, you know, posited -- "If you do this, our industry will go bankrupt, my household will go bankrupt, I'll be homeless and have to go live on the beach." Then sometimes that's true for some of the people, but they are acting strategically. People are always going to act to some extent in their own self-interest. So they are going to -- if they are opposed to a change, they

are going to try and put forth a lot of different arguments so that change won't happen. If the change happens, then people are -- we're a very adaptable species, the most adaptable species on earth, right? We will probably cope, although not necessarily without great loss, and some of us are less likely to cope successfully than others.

So we rely on people to express meaning, but we have to be careful of taking what they say and saying this is the impact. Right? That's what science -- that's what science is for. That's what history is for. That's what case studies are for where we've had -- and I'll get to that when we get to kind of the how-to part. But I just wanted to get us thinking about that.

So I have a number of different types of projects here, and we're going to go through and just list, and I'll highlight a couple of them once in a while and say something about them just to illustrate the types of variables that social scientists have studied in social impact assessments. And this says "construction project effects," but it also applies to the oil and gas examples where you have a big influx of new types of people coming into a community for some period of time. So you want to look at population impacts and the values, how many people are coming in and the values of those people, and you want to be able to identify areas where there might be social conflicts between local residents and those newcomers so that communities can understand these and can mitigate these and can deal with these, so they can come up with the institutional

arrangements, the mechanisms. Roy mentioned the socioeconomic committee that has been established in Pinedale in Sublette County to address social and economic impacts and to monitor them and to get everyone at the table saying, okay, how can we deal with this? That's an example of an institutional mechanism that can be developed to help deal with some of these impact, to help cope with those impacts. And community infrastructure needs should be abundantly clear from the Pinedale example, too. You know, do we need roads? Do we need schools? Do we need housing? How do we -- what do we have to do to deal with this construction project impact so we can kind of minimize some of the effects socially?

This is one of my favorite social impact assessments on the Exxon Valdez oil spill, was done really well, and it was able to document a number of different types of social and economic impacts to the communities affected by the spill.

There were disruptions of usual ways of living, a lot of which included impacts to health, loss of personal and community control, and a very significant displacement of kind of the normal way of doing things in the communities. And this is kind of surprising to people sometimes because maybe what you heard about is the huge influx of money into these communities and suddenly everyone could make 20 bucks an hour cleaning up oil and cleaning up birds, and so these people from communities that were largely subsistence communities where there were not that many jobs suddenly had this opportunity to make huge amounts of money in a short period of time. So this is a good thing, right? Well, partly.

I have the executive summary of this social impact assessment. This was done by Impact Assessment, Incorporated, and I bet you could find it on the web somewhere. It's a great example of a social impact assessment and it's a great example of what you can do with data, because listen to some of these statements and think in your mind what those statements would look like and how much weight they would carry in the absence of quantitative data. "There was a 90% increase post-spill general anxiety disorder, a 99% increase in post-spill post-traumatic stress disorder, a 90% increase in post-spill depression, 11.4 times more drinking, 7.4 times more drug use, 11.6 times more domestic violence. 45% of those who worked on the cleanup reported less time spent with other household members compared to 16% of those who did not work on the spill."

So they're doing research that not only measures pre and post conditions, before and after the spill, but between people who were more affected by the spill or more involved in the cleanup and those who were less affected by the spill or less involved in the cleanup activities.

"79% of all parents reported they did not get along with their children as well as they did before the spill."

So some of these are self-reported measures. So if you're relying on self-reports like this, you would also want to couple this with measurements of visits to

Social Impact Assessment (cont)

counselors and measurements of police calls, and that's what Joan meant by

getting data from different sources. They wouldn't have wanted to rely only on

self-report data here, would they? That's a valuable source of information, but if

you can supplement that with visits to mental health counselors, then that makes

it more -- it convinces -- it increases our confidence that this social phenomenon

is really occurring and is really important.

"42% of those interviewed reported decreased time spent in hunting, fishing and

gathering activities. 35% indicated a decrease in time spent in joint subsistence

activities with people from other households." So this is a social aspect of

subsistence. So that was affected as well.

So, you know, this report is full of very quantitative, very well supported

documentation of a wide range of impacts, and they knew that this would end up

in court. So they knew that if they didn't do a good job it would get trashed and

all their work would be for nothing. So one of the tips and tricks I have later is

pretend that everything you write is going to end up on the witness stand.

Yeah, Bunny?

CLASS PARTICIPANT: So did they in this study ask about any of the impacts on

non--- off-site?

Social Impact Assessment (cont)

PRESENTER: Yeah. Yeah, they covered 20 some communities and some of

which were, you know, really strongly affected and some of which weren't. So

they kind of got at it that way. What other types of things did you have in mind?

CLASS PARTICIPANT: Some of the things that John said, because this impact

wasn't just -- the impacts of this oil spill weren't directly -- I mean, they were

directly related to the people that lived in Alaska, but this was a much larger

social issue than just what occurred in Alaska. So I was just wondering if there

was any impact -- things -- opinions of people in the United States.

PRESENTER: There was a very controversial, very expensive state of Alaska

funded contingent valuation study that was done as part of the natural resource

damage assessment.

PRESENTER: Yes, but this particular study only looked at these 20 some

communities, but other work was done. I mean, this project is still generating

millions of dollars for universities and consultants in all kinds of research, and

attorneys, you bet.

CLASS PARTICIPANT: The social impacts are there still --

PRESENTER: Yes.

Social Impact Assessment (cont)

CLASS PARTICIPANT: Because I have a lot of friends in that area, and they're

still affected by that to this day because they were hoping to get something that

from -- monetary -- some money from the impact. But they haven't had anything

yet, so it still has a real big impact.

PRESENTER: But the court case on the settlement is still going on, and plenty

of claimants have died. It's been 20 years. I mean, a lot of people have died

waiting to get their money from Exxon. It's a social tragedy.

CLASS PARTICIPANT: [inaudible]

PRESENTER: And I'm glad you mention that because it points out that these

impacts have a temporal scale to them, too. A long time later these impacts are

still felt and still affects people in the communities that were affected.

So I could spend a long time talking on that, but if you're interested, go -- hunt

down a copy of that social impact assessment by Impact Assessment,

Incorporated.

The Interior Columbia Basin Project social impact section, we looked at effects

on predictability of resource flows, and I used this example just to point out that,

you know, one concern most typically is with the degree, the amount of timber, of

AUM's, of change that will be produced in extractible products from the land, but

another concern typically for businesses and workers is effects on their predictability and so that was one thing we looked at, you know. Plenty of people came and told us, "Just tell me the level, just tell me the level. If it's up here, I want to know. If it's down here, I want to know. I want to be able to plan. I don't want to think it's here and find out it's here, or think it's here and find out it's here, because I can't adapt that quickly. Just give me some idea of cycles or levels of outputs that we can expect for resources associated with Forest Service and BLM lands."

Effects on access to decision making and effects on private lands are kind of -- all kind of lumped together and just say that, you know, the E word, the ecosystem word, was really threatening to a lot of people living in the study area and frankly to a lot of agencies, too, because when you're looking at an ecosystem of this scale, we show the area that we were covering in the analysis here, the fear was that my ranch, my private land, my logging operation, my ranger district are going to get lost in here. Decisions are going to be made at this huge level and I'm going to lose whatever voice or whatever opportunity I had to influence what happens on public lands I care about or what happens on private lands I care about because they'll all be swept up and decisions will be made on an ecosystem scale and I will have less access to decision making. I will have less ability to use my land the way I want to. And so this was a concern, a social concern, a uniquely social concern, really, that was important enough that we just said, okay, well, we're going to assess the impacts on

access to decision making and on ability to undertake activities you want to on private lands under each of the alternatives. So we looked at this.

One of my favorite [inaudible] pictures this is not, this is a friend, but you usually don't see that kind of backdrop, do you. So this is in Yakitat, one of my favorite places in Southeast Alaska, and when we were working on another infamous plan, TLM (phonetic), the Tongass National Forest Plan, these are the things we looked at. One factor was employment in tourism, recreation, timber and mining industries, because those were expected to change. We looked at economic structure and diversity in both the community scale and a regional scale, and in conjunction with that we looked at community stability and resiliency because these are little communities, for the most part quite isolated, not a lot of economic structure.

So if you affect access to subsistence resources, or if you affect employment opportunities, it doesn't take a very big effect to have a really big impact. It doesn't take a really big change to make a really big impact on some of these little communities.

Quality of life, recreation opportunities and access to traditional lifestyles, including subsistence uses.

So you're starting to see, I hope, how the scale of the project, the scope of the

project, the range and impact of the alternatives really affects what you want to study changes in and what you want to talk about in a social impact assessment.

Here's a Hawaii example, and I'm going to return to this a little bit in step 9 in monitoring, so I won't deal with it too much now, but suffice it to say that a few years ago the National Marine Fisheries Service closed swordfish fishery, not because of any impacts or concerns about swordfish but because of bycatch of threatened and endangered turtle species that was occurring as part of the long-line catch. And so the swordfish fishery was closed and this affected the Vietnamese fishermen portion of the long-line fleet who had specialized in targeting swordfish. So what does this immediately raise to the social scientist? Yeah, this is an environmental justice issue because you are most certainly disproportionately affecting a minority group.

So we looked at effects on psychological well being, family well being, the cohesion of the Vietnamese community and the cohesion of the entire long-line fishing community, and then we looked at there were some rather important cumulative effects because there were a lot of other things that were occurring at this time that were also -- had the potential to affect people's ability to sustain their activity in the swordfish fishing. So there were some rather significant cumulative impacts that we had to consider as well when we looking at the impacts to the Vietnamese-American component of the fishery.

So I hope that gives you just a kind of a flavor of the types of variables you consider looking at depending on what type of changes you're anticipating.